



European Expert Network
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Teacher education for the green transition and sustainable development

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EENEE Policy Brief

Current opportunities and challenges

The green transition requires that we all learn to live and work in more sustainable ways. Teacher education is one of the most significant catalysts for bringing innovation and sustainability into our education systems, and thus supporting learners to shape this transition.

Sustainability is not a curriculum priority. Its coverage, scope and depth has significantly improved over recent years, but much remains to be done if Learning for Sustainability (Lfs) is to be offered to all students at all levels and in all schools.

Although teachers are generally aware and eager to teach sustainability, many do not feel ready to do so. Current efforts in Initial Teacher Education (ITE) tend to be isolated and fragmented, rather than being mainstreamed into existing teachers' professional learning programmes. In continuing professional development (CPD) programmes, Lfs is often characterised by theoretical, one-time, decontextualized sessions for groups of individual teachers seeking to improve their teaching practice. Professional learning opportunities in sustainability need to be scaled-up and deepened to promote a whole-school approach to sustainability.

Most teachers feel a desire to continue learning about sustainability through informal as well as formal professional development. Although they are aware that opportunities in this area exist in their countries, in many cases they have not taken them up. It is important that policymakers look into the factors that prevent teachers from engaging in sustainability training, as well as developing and strengthening incentives and the recognition given for participation.

Developing teacher competences

Numerous Lfs teacher competence frameworks and accompanying tools have been developed and piloted over recent years. However, due to their complexity and divergence from existing practice, they have had little impact on teacher education to date. Designing teacher education opportunities in Lfs requires the adaptation of existing Lfs and teacher education competence frameworks so that they consider national and institutional contexts. Professional development that involves substantial contact hours over an extended period of time is more effective in developing teacher competences. In addition, teachers learn most effectively when programmes are content focused, use active learning, support collaboration, are school-based, use modelling of effective practice, provide mentoring support, and offer opportunities for feedback and critical reflection.

Catalytic entry points into teacher education

Lfs as a political and policy commitment: political commitment and leadership at the highest levels has proven to be catalytic in the drive to embed Lfs into teacher education. A 'whole-of-government' approach enhances the reach of policies, as does the aligning of initiatives with national policy agendas.

Professional competences and standards – driving quality throughout schools: embedding Lfs into professional standards for teachers is one of the most effective ways to mainstream sustainability. Establishing expectations and pathways for teachers to develop competences in Lfs during their careers is also an impactful way of embedding sustainability learning in schools.

Recognition and reward – incentivising and motivating teachers: recognition schemes can incentivise educators to deepen their engagement with LfS. Including LfS criteria into role descriptions and the responsibilities of positions has been shown to be effective in scaling up sustainability learning efforts.

Micro-credentials and the certification of learning: micro-credentials that are flexible, relevant and offer equal opportunities for certifying professional competences offer great incentives to teachers and teacher educators. These can drive engagement in sustainability.

Resources for a sustainable future: quality teacher resources can be key to mainstreaming LfS initiatives in schools. These must align with the needs of teachers in this area, as well as being based on extensive piloting.

Changing together – collaborative enquiries and peer learning: LfS networks and platforms have proved instrumental in activating a cultural change in schools and teacher education, especially where there is a lack of dedicated support for LfS from government. Participatory research approaches and change academies provide ideal platforms for institutions to challenge their perceptions about sustainability, as well as clarifying what it means to create authentic learning opportunities.

Framing LfS as educational innovation or renewal: efforts that articulate the value of LfS to education and learners can deepen the engagement of teachers and educators. Such efforts are effective in reaching teachers who are yet to commit to sustainability but who have an interest in educational quality or creating better opportunities for students. Furthermore, initiatives that connect LfS with the improvement of educational pedagogies more broadly, as well as other educational agendas such as the digital transition, have a greater chance of success.

Fresh insights and visions – futures education and new technologies: connecting teachers with research groups that are engaging with futures and digital learning projects can inspire teachers to rethink their practices in the light of sustainability. Such initiatives offer significant potential to shape learning experiences in LfS and to envision alternative futures using the help of new technologies. However, it must be recognised that while some teachers are captivated by innovations such as the metaverse, others fear the changes that technology might bring.

Recommendations

Celebrate by showcasing political leadership and policy commitment towards LfS by specific EU Member States, within the context of teacher education. Promote a whole-of-government response to LfS that leads to integrated policy and use of resources.

Convene authorities, agencies and professional groups to consider how to embed LfS into professional standards or competence frameworks for teachers. Integrate LfS into definitions of what it means to be a qualified and effective teacher. Establish expectations, evaluation systems and pathways for teachers to develop and demonstrate competences in this area.

Promote the use of self-evaluation approaches and reflective practice tools to drive the development of teachers' competences in LfS. This should be achieved by establishing networks of teachers, evaluators and 'critical friends' that encourage deep reflection and challenge current practices.

Recognise good practice in schools, colleges and teacher education, as well as outstanding educators in LfS, through the use of award schemes. A Europe-wide competition could motivate engagement but also trigger conversations about what constitutes good practice in this area.

Create, via grants and funding schemes, spaces for teachers and teacher educators to grow LfS projects through teacher collaboration and peer-learning. Encourage authorities and agencies to provide similar collaborative learning pathways at national and sub-regional levels.

Incentivise teachers to develop their competences and experiences in LfS. This can be achieved by including sustainability criteria in role descriptions, the responsibilities of positions, and in career progression profiles. A compilation that captures the best examples of these could be published and shared.

Support teacher education providers through targeted schemes that provide funding, networking platforms and other resources to assist them in integrating LfS into their professional education and development offerings. Such efforts should be aimed at initial and practising teachers as well leadership teams.

Develop guidelines and a set of criteria to evaluate the effectiveness of LfS professional development programmes and resources offered by teacher education providers. Encourage the adaptation of these guidelines at national and sub-regional levels, and for particular stakeholder groups.

Encourage the certification of LfS training through micro-credentials. These micro-credentials should be flexible, relevant, offer equal opportunities to teachers, and be transferrable. Experimentation and piloting in this area should be encouraged.

Advance the development of resources for teacher education providers by adopting LfS as a pedagogical strategy within a whole-school approach. These resources should be relevant to teachers' needs in this area (and not simply environmental objectives).

Raise awareness of the importance of multi-stakeholder platforms that provide professional learning opportunities and facilitate access to LfS materials, especially where there is a lack of dedicated support from government, or of sub-regional opportunities in relation to sustainability learning.

Invest in participatory action research and change academies that enable stakeholder groups to develop and implement strategic actions for LfS. Encourage national authorities and professional bodies to support these processes.

Define the value of LfS to learners, and demonstrate how it can contribute to meeting core educational priorities. This will attract the attention of those teachers who are not yet engaging with sustainability, but who may be curious to learn more.

Connect programmes and funding schemes that encourage better alignment between the digital and green transitions in teacher education, as a way of increasing the uptake of LfS by teachers. Encourage authorities and agencies to do likewise.

Inspire greater engagement with LfS through partnerships that will encourage teacher education providers to experiment with the areas of futures thinking and the metaverse, and explore ways to go beyond the boundaries of current educational approaches.



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